What is Claimed is:

1. A process for preparing a mixture of sorbitol fatty acid esters and sorbitol anhydride fatty acid esters comprising the step of:

   (a) reacting a reaction mixture which is essentially free from water, comprising sorbitol and at least one free fatty acid, wherein the molar ratio of free fatty acid to sorbitol is at least 5:1, at a temperature and for a time sufficient to effect an average degree of sorbitol hydroxyl substitution of from about 3 to about 5.5 fatty acid groups per sorbitol molecule, thereby forming an esterified reaction product mixture comprising sorbitol fatty acid esters and sorbitol anhydride fatty acid esters.

2. The process of claim 1 wherein said reaction mixture further comprises an esterification catalyst.

3. The process of claim 2 wherein said esterification catalyst is selected from the group consisting of alkali metal soaps, alkaline earth metal soaps, inorganic acids, carboxylic acids, polycarboxylic acids, and salts, oxides, and hydroxides of alkali metals, alkaline earth metals, transition metals, aluminum, and zinc.

4. The process of claim 2 wherein said esterification catalyst is an alkali metal soap.

5. The process of claim 1 wherein said average degree of sorbitol hydroxyl substitution is about 4.0 to about 5.5 fatty acid groups.

6. The process of claim 1 wherein the molar ratio of free fatty acid to sorbitol is from about 5:1 to about 15:1.

7. The process of claim 1 wherein the molar ratio of free fatty acid to sorbitol is from about 7:1 to about 12:1.

8. The process of claim 1 wherein said reaction mixture is reacted in step (a) at a temperature of from about 170 to about 260 °C.

9. The process of claim 1 wherein said reaction mixture is reacted in step (a) at

a temperature of from about 170 to about 190 °C.

10. The process of claim 1 wherein said reaction mixture is reacted in step (a) for a time of from about one half to about 24 hours.

11. The process of claim 1 wherein said reaction mixture is reacted in step (a) for a time of from about 2 to about 8 hours.

12. The process of claim 4 wherein said alkali metal soap catalyst is formed *in situ* from an alkali metal compound and the at least one free fatty acid present in said reaction mixture of step (a).

13. The process of claim 4 wherein said alkali metal soap catalyst is formed prior to step (a) in a preliminary step comprising heating a mixture of an alkali metal compound and at least one free fatty acid.

14. The process of claim 12 wherein said alkali metal compound is selected from the group consisting of potassium hydroxide, potassium carbonate, sodium hydroxide, sodium carbonate, sodium bicarbonate, and mixtures thereof.

15. The process of claim 13 wherein said alkali metal compound is selected from the group consisting of potassium hydroxide, potassium carbonate, sodium hydroxide, sodium carbonate, sodium bicarbonate, and mixtures thereof.

16. The process of claim 4 wherein said alkali metal soap catalyst is present in an amount ranging from about 0.3 mole to about 1.5 mole per mole of sorbitol present in the reaction mixture.

17. The process of claim 1 wherein said at least one free fatty acid is selected from the group consisting of acetic, propionic, butyric, caproic, caprylic, pelargonic, capric, undecanoic, lauric, myristic, palmitic, oleic, elaidic, myristoleic, palmitoleic, ricinoleic, erucic, stearic, arachidic, behenic, linoleic, linolenic, eleostearic, arachidonic acids, and mixtures thereof.

18. The process of claim 1 wherein said at least one free fatty acid is obtained from non-hydrogenated, partially hydrogenated, or hydrogenated oils selected from the group consisting of soybean oil, safflower oil, sunflower oil, sesame oil, peanut oil, corn oil, olive oil, rice bran oil, canola oil,

rapeseed oil, shea nut oil, babassu nut oil, coconut oil, palm kernel oil, cottonseed oil, palm oil, cocoa butter, cohune oat, tacum ucuhuba, butterfat, tallow, lard, or mixtures thereof.

19. The process of claim 1 wherein said at least one free fatty acid is essentially free of oxidative degradation products.

20. The process of claim 1 wherein the reaction mixture further comprises an absorbent selected from the group consisting of activated carbon and clay.

21. The process of claim 1, further comprising the steps of:

(b) separating unreacted free fatty acid from said esterified reaction product of step (a),

(c) removing oxidative degradation products from the unreacted free fatty acid separated in step (b), and

(d) recycling the unreacted free fatty acid free of oxidative degradation products from step (c) to the reaction mixture of step (a).

22. The process of claim 21 wherein vacuum distillation is used to remove the oxidative degradation products from the unreacted free fatty acid in step (c).

23. A mixture of sorbitol fatty acid esters and sorbitol anhydride fatty acid esters having a degree of hydroxyl substitution of about 4.0 to about 5.5 fatty acid groups and exhibiting a Lovibond red scale color of about 5 or less, prepared by the process of claim 1.

24. The mixture of claim 23 wherein the Lovibond red scale color is below about 1.5.